

## Pyeloduodenal fistula diagnosed by esophagogastroduodenoscopy

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A 58-year-old male received treatment for right ureteral stone, including non-steroid anti-inflammatory drugs for pain relief. Owing to persistent abdominal pain he underwent computed tomography that revealed right hydronephrosis and abdominal abscess, managed by right ureteral stent placement. However, his symptoms did not resolve and an esophagogastroduodenoscopy (EGD) was performed which revealed a penetrating duodenal ulcer in the second portion of the duodenum (Fig. 1). Three days later he underwent a second EGD this time under fluoroscopic guidance, which revealed a fistula penetrating the right renal pelvis (Fig. 2). The patient continued to receive conservative treatment, leading to scarring and resolution of the duodenal ulcer without necessitating surgery.

First described in 1893 [1], pyeloduodenal fistulas are frequently diagnosed using intravenous or retrograde pyelography, although the rate of diagnosis is low [2]; the diagnosis of these lesions using duodenography is also rare. The present case is very rare in that the fistula was confirmed by EGD. Surgical treatment is often selected for similar cases, however, conservative management may be tried in selected cases when the renal function is preserved [3]. In the present case, the patient's renal function was preserved and the infection could be controlled, so surgery could be avoided. This disorder is difficult to diagnose, but our case suggests that EGD may be useful in such cases.

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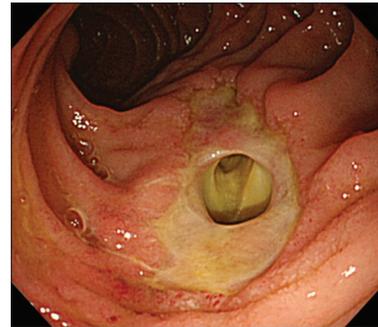


Figure 1 Esophagogastroduodenoscopy revealed a fistula in the duodenum

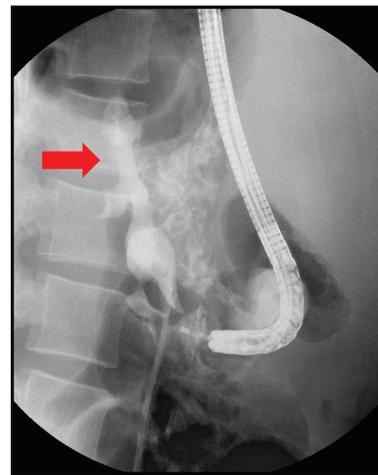


Figure 2 Duodenography using an endoscope demonstrated the right renal pelvis (red arrow)

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